Jack M Rogers

List of Publications by Year
in descending order

62 papers	2,687 citations	147801 31 h-index	182427 51 g-index
63 all docs	63 docs citations	63 times ranked	1744 citing authors

#	Article	IF	Citations
1	A collocation-Galerkin finite element model of cardiac action potential propagation. IEEE Transactions on Biomedical Engineering, 1994, 41, 743-757.	4.2	338
2	Estimation of conduction velocity vector fields from epicardial mapping data. IEEE Transactions on Biomedical Engineering, 1998, 45, 563-571.	4.2	246
3	Phase Mapping of Cardiac Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2010, 3, 105-114.	4.8	145
4	Optical mapping of Langendorff-perfused human hearts: establishing a model for the study of ventricular fibrillation in humans. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H875-H880.	3.2	109
5	Activation Patterns of Purkinje Fibers During Long-Duration Ventricular Fibrillation in an Isolated Canine Heart Model. Circulation, 2007, 116, 1113-1119.	1.6	92
6	Incidence, Evolution, and Spatial Distribution of Functional Reentry During Ventricular Fibrillation in Pigs. Circulation Research, 1999, 84, 945-954.	4.5	83
7	Chemical ablation of the Purkinje system causes early termination and activation rate slowing of long-duration ventricular fibrillation in dogs. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H883-H889.	3.2	79
8	Lifetimes of epicardial rotors in panoramic optical maps of fibrillating swine ventricles. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H1935-H1941.	3.2	68
9	Evolution of activation patterns during long-duration ventricular fibrillation in dogs. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1193-H1200.	3.2	66
10	Nonuniform Muscle Fiber Orientation Causes Spiral Wave Drift in a Finite Element Model of Cardiac Action Potential Propagation. Journal of Cardiovascular Electrophysiology, 1994, 5, 496-509.	1.7	58
11	Epicardial organization of human ventricular fibrillation. Heart Rhythm, 2004, 1, 14-23.	0.7	58
12	RHYTHM: An Open Source Imaging Toolkit for Cardiac Panoramic Optical Mapping. Scientific Reports, 2018, 8, 2921.	3.3	58
13	A quantitative framework for analyzing epicardial activation patterns during ventricular fibrillation. Annals of Biomedical Engineering, 1997, 25, 749-760.	2.5	56
14	Effects of heart isolation, voltage-sensitive dye, and electromechanical uncoupling agents on ventricular fibrillation. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 284, H1818-H1826.	3.2	56
15	A Novel Approach to Dual Excitation Ratiometric Optical Mapping of Cardiac Action Potentials With Di-4-ANEPPS Using Pulsed LED Excitation. IEEE Transactions on Biomedical Engineering, 2011, 58, 2120-2126.	4.2	56
16	Three-Dimensional Surface Reconstruction and Panoramic Optical Mapping of Large Hearts. IEEE Transactions on Biomedical Engineering, 2004, 51, 1219-1229.	4.2	55
17	Locally Propagated Activation Immediately After Internal Defibrillation. Circulation, 1998, 97, 1401-1410.	1.6	54
18	Optical Mapping of Membrane Potential and Epicardial Deformation in Beating Hearts. Biophysical Journal, 2016, 111, 438-451.	0.5	53

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19	Combined Phase Singularity and Wavefront Analysis for Optical Maps of Ventricular Fibrillation. IEEE Transactions on Biomedical Engineering, 2004, 51, 56-65.	4.2	48
20	Regional Differences in Ventricular Fibrillation in the Open-Chest Porcine Left Ventricle. Circulation Research, 2002, 91, 733-740.	4.5	47
21	Recurrent wavefront morphologies: A method for quantifying the complexity of epicardial activation patterns. Annals of Biomedical Engineering, 1997, 25, 761-768.	2.5	45
22	Fiberglass needle electrodes for transmural cardiac mapping. IEEE Transactions on Biomedical Engineering, 2002, 49, 1639-1641.	4.2	45
23	Evolution of the Organization of Epicardial Activation Patterns During Ventricular Fibrillation. Journal of Cardiovascular Electrophysiology, 1998, 9, 1291-1304.	1.7	44
24	Wave front fragmentation due to ventricular geometry in a model of the rabbit heart. Chaos, 2002, 12, 779-787.	2.5	44
25	The Importance of Purkinje Activation in Long Duration Ventricular Fibrillation. Journal of the American Heart Association, 2014, 3, e000495.	3.7	42
26	Fibrillation is More Complex in the Left Ventricle than in the Right Ventricle. Journal of Cardiovascular Electrophysiology, 2000, 11, 1364-1371.	1.7	39
27	Sustained Reentry in the Left Ventricle of Fibrillating Pig Hearts. Circulation Research, 2003, 92, 539-545.	4.5	39
28	Improvement of Defibrillation Efficacy and Quantification of Activation Patterns During Ventricular Fibrillation in a Canine Heart Failure Model. Circulation, 2001, 103, 1473-1478.	1.6	37
29	Panoramic Optical Mapping Reveals Continuous Epicardial Reentry during Ventricular Fibrillation in the Isolated Swine Heart. Biophysical Journal, 2007, 92, 1090-1095.	0.5	36
30	K_{ATP} channel inhibition blunts electromechanical decline during hypoxia in left ventricular working rabbit hearts. Journal of Physiology, 2017, 595, 3799-3813.	2.9	36
31	The effects of acute and chronic amiodarone on activation patterns and defibrillation threshold during ventricular fibrillation in dogs. Journal of the American College of Cardiology, 2002, 40, 375-383.	2.8	33
32	Simultaneous optical mapping of transmembrane potential and wall motion in isolated, perfused whole hearts. Journal of Biomedical Optics, 2011, 16, 1.	2.6	32
33	Evolution of activation patterns during long-duration ventricular fibrillation in pigs. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H992-H1002.	3.2	32
34	Human Ventricular Fibrillation. Circulation, 2006, 114, 530-532.	1.6	31
35	Quantification of activation patterns during ventricular fibrillation in open-chest porcine left ventricle and septum. Heart Rhythm, 2005, 2, 720-728.	0.7	29
36	Steepness of the Restitution Curve: A Slippery Slope?. Journal of Cardiovascular Electrophysiology, 2002, 13, 1173-1175.	1.7	28

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37	Pacing During Ventricular Fibrillation: Factors Influencing the Ability to Capture. Journal of Cardiovascular Electrophysiology, 2001, 12, 76-84.	1.7	26
38	Fibrillating Myocardium. Circulation Research, 2000, 86, 369-370.	4.5	24
39	Comparison of Conventional and Biventricular Antitachycardia Pacing in a Geometrically Realistic Model of the Rabbit Ventricle. Journal of Cardiovascular Electrophysiology, 2004, 15, 1066-1077.	1.7	24
40	Endocardial wave front organization during ventricular fibrillation in humans. Journal of the American College of Cardiology, 2002, 39, 109-115.	2.8	20
41	Cardiomyocytes from CCND2-overexpressing human induced-pluripotent stem cells repopulate the myocardial scar in mice: A 6-month study. Journal of Molecular and Cellular Cardiology, 2019, 137, 25-33.	1.9	19
42	Mechanisms for the Maintenance of Ventricular Fibrillation: The Nonuniform Dispersion of Refractoriness, Restitution Properties, or Anatomic Heterogeneities?. Journal of Cardiovascular Electrophysiology, 2005, 16, 888-897.	1.7	16
43	Panoramic optical mapping shows wavebreak at a consistent anatomical site at the onset of ventricular fibrillation. Cardiovascular Research, 2012, 93, 272-279.	3.8	16
44	Highâ€resolution optical mapping of gastric slow wave propagation. Neurogastroenterology and Motility, 2019, 31, e13449.	3.0	16
45	Can mapping differentiate microreentry from a focus in the ventricle?. Heart Rhythm, 2009, 6, 1666-1669.	0.7	13
46	Change in Conduction Velocity due to Fiber Curvature in Cultured Neonatal Rat Ventricular Myocytes. IEEE Transactions on Biomedical Engineering, 2009, 56, 855-861.	4.2	12
47	Types of Ventricular Fibrillation:. Journal of Cardiovascular Electrophysiology, 2004, 15, 1441-1443.	1.7	11
48	Epicardial mapping of ventricular fibrillation over the posterior descending artery and left posterior papillary muscle of the swine heart. Journal of Interventional Cardiac Electrophysiology, 2009, 24, 11-17.	1.3	9
49	Optocardiography and Electrophysiology Studies of Ex Vivo Langendorff-perfused Hearts. Journal of Visualized Experiments, 2019, , .	0.3	9
50	Controlled postcardioplegia reperfusionMechanism for attenuation of reperfusion injury. Journal of Thoracic and Cardiovascular Surgery, 2000, 119, 1093-1101.	0.8	8
51	Epicardial rotors in panoramic optical maps of fibrillating swine ventricles. , 2006, 2006, 2268-71.		7
52	Effects of gadolinium on cardiac mechanosensitivity in whole isolated swine hearts. Scientific Reports, 2018, 8, 10506.	3.3	7
53	Verapamil reduces incidence of reentry during ventricular fibrillation in pigs. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1361-H1369.	3.2	6
54	Reduction in Atrial Defibrillation Threshold by a Single Linear Ablation Lesion. Journal of Cardiovascular Electrophysiology, 2001, 12, 463-471.	1.7	5

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55	Optical mapping of electromechanics in intact organs. Experimental Biology and Medicine, 2020, 245, 368-373.	2.4	4
56	Effects of combination of sotalol and verapamil on initiation, maintenance, and termination of ventricular fibrillation in swine hearts. Cardiovascular Therapeutics, 2018, 36, e12326.	2.5	2
57	Mapping a Moving Target. Journal of Cardiovascular Electrophysiology, 2003, 14, 1085-1086.	1.7	1
58	Right ventricular insertion promotes reinitiation of ventricular fibrillation in defibrillation failure. Heart Rhythm, 2021, 18, 995-1003.	0.7	1
59	Ventricular fibrillation: Discordant alternans and discordant results. Heart Rhythm, 2007, 4, 1069-1071.	0.7	0
60	Progress in modeling cardiac electrical activity: A long way from spherical cows. Heart Rhythm, 2008, 5, 1045-1046.	0.7	0
61	Shifting Ventricular Fibrillation Drive Mechanism as Time Progresses. JACC: Clinical Electrophysiology, 2015, 1, 198-199.	3.2	0
62	Racing to the flatline: heart rate and Î²-adrenergic stimulation quicken the pace. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H977-H979.	3.2	0